Virginia Department of Health -

TB Control and Prevention Program

Recommended Sample Collection Schedule for Monitoring Smear and Culture Conversion in Pulmonary TB Cases

Purpose	Monitoring	Frequency	Number of specimens	Comments
To determine infectiousness	Initial contact with client	Collect 3 consecutive specimens	Minimum of 3 samples, with one collected in the early morning.	At least one specimen collection should be observed / coached by HD staff.
and confirmation of TB disease			If diagnosis has been confirmed before the client is reported, collect 3 additional specimens to determine if infectious.	At minimum, samples should be at least 8 hours apart.
To establish earliest date a client can be removed from isolation	Initial monitoring for smear conversion	Initial & Follow-up sputum smear results 3+ to 4+ Every two weeks Rare to 2+ weekly	Collect 1 specimen at each collection until smear conversion imminent. Total number of specimens will vary from client to client.	Single specimens should be observed by HD staff. Refer to "Controlling Tuberculosis in the United States," 11/4/2005, Vol. 54, No. RR-12, Page 9, Box 3 for alternate criteria for isolation release.
	Imminent smear conversion (1st neg or with rare or +/- AFB on smear)	Collect 1 specimen every few days or weekly. Once a negative result is obtained, collect 2 additional specimens.	Until 3 consecutive smears are negative (if any subsequent samples are smear positive, continue weekly collection).	
To monitor for response to treatment and determine the need for extension of treatment	Culture conversion	Continue to collect one sample every 7-10 days (3 maximum per month with one of these collected 55-60 days after treatment initiation).	Until 2 consecutive sputum <u>cultures</u> are negative with no positive culture results thereafter.	Single specimens should be observed by HD staff. Perform sputum induction if unable to produce sputa spontaneously. Several induction attempts on different days should be undertaken before deciding that a client can no longer produce sputum.
and For Test of Cure	Test of Cure	For selected patients (MDR-TB; documented resistance to more than 1 anti-TB drug (do not count SM); extensive disease; HIV+ with low CD4) continue to collect sputa samples monthly until completion of treatment.	Continue monthly collection until treatment completion. If client is unable to produce sputum, sputum induction should be attempted.	Single specimens should be observed by HD staff. Several induction attempts on different days should be undertaken before deciding that a client can no longer produce sputum.